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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/007,149	12/05/2001	John R. Schneider	1646A1	1918

7590 01/31/2005

PPG INDUSTRIES, INC.  
Intellectual Property Department  
One PPG Place  
Pittsburgh, PA 15272

EXAMINER
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RAJGURU, UMAKANT K

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 01/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/007,149

Applicant(s)

SCHNEIDER ET AL.

Examiner

Umakant K. Rajguru

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-45 and 50-58 is/are pending in the application.
- 4a) Of the above claim(s) 34-41 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-33, 42-45 and 50-58 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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1. A response has been filed on October 21, 2004.
2. Claims 1-33, 42-45 and 50-58 are being examined.
3. Applicant's request for consideration of claims 51 & 52 is accepted and those claims have now been considered.
4. Rejections of respective claims under 35 USC 102(b) as being anticipated by Stubbs et al (US 5595578) or Samuelson (US 4048765) (see items 5 & 6 of prior office action of July 21, 2004) are now withdrawn.
5. Other rejections (see items 7-9 of same office action) are maintained.
6. Stubbs uses polyurethane as a film forming resin and abrasive particles (col. 2, lines 1-33; col. 7, lines 15-27). Both these ingredients read on those that are covered by instant specification. The refractive index of each of these components is a well-known property. Though Stubbs is silent about this property, it is the examiner's position, that unless proved to be otherwise by the applicants, it is reasonable to assume that polymer & particles of Stubbs inherently satisfy this limitation. This clarification should be enough to establish that Stubbs renders claims 1-7, 9-27, 29, 42-58 prima facie obvious.

Examiner thanks the applicants in pointing out a typographical error in mentioning "aluminum". The correct word should be "alumina".

Applicants mention (on page 3 of their response) regarding claims 10-12, that there is no teaching either in Stubbs or Samuelson. This is true. That is why the examiner has pointed out to Monroe et al (US 5611 829), which teaches abrasive grain containing alpha alumina silica and iron oxide.

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Out of claims 42-50, claims 42-44 recite properties that (the examiner has mentioned) are inherently satisfied. Claim 45 requires particles to be preheated. Samuelson offers this teaching in col. 8, lines 56-57.

Diener et al (US 5614250) teaches in col. 4, lines 28-49, the three claimed types of silica. It is true that Diener's silica's are coated. Instant claim 8 fails to exclude coated silica. Motivation to use this silica arises from the fact that they have very fine particle sizes, which makes them disperse very easily in the polymer matrix. They further act as antisetling agents.

7. Claims 51 & 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ono et al (US 5015671).

Ono discloses powder coating composition comprising an epoxy resin, a curing agent and aluminum hydroxide together with silica (abstract). Av. particle size of aluminum hydroxide is 0.5 to 60 microns (col. 2, lines 62-64). Mixed filler i.e. aluminum hydroxide + silica is used at 40-300 parts per 100 parts by wt of epoxy (col. 3, lines 13-24). Out of 40 parts, as low as 8 parts can be aluminum hydroxide and 32 parts silica.

*seen*  
*OK* Thus it is <sup>seen</sup> that 8 parts of aluminum hydroxide can be used.

Ono does not explicitly disclose the claimed particle size and claimed amounts. Nonetheless it would have been obvious to vary these two parameters as needed to achieve desired product. Hence it would have been obvious to follow Ono and arrive at claimed invention.


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Umakant K. Rajguru whose telephone number is 571-


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272-1077. The examiner can normally be reached on Monday thru Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J. Seidleck can be reached on 571-272-9306. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Rajguru/LR  
January 13, 2005

  
James J. Seidleck  
Supervisory Patent Examiner  
Technology Center 1700